Oct 11 '34

THE JOURNAL
—— OF THE ——
Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XXI
NO. 1

Jacksonville, Florida, July, 1934

Yearly Subscription, $3.00
Single Copy, 30c

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NEXT SESSIONS Florida Medical Association, Ocala, 1935.
Southern Medical Association, San Antonio, November 13-16, 1934.

Entered as second-class matter under Act of Congress of March 3, 1879, at the Postoffice at Jacksonville, Florida, October 23, 1924

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION
PUBLISHED MONTHLY

Volume XXI | Jacksonville, Florida, July. 1934 | Number 1

OPHTHALMOLOGY AND ITS RELATION TO GENERAL MEDICINE AND SURGERY*

NELSON M. BLACK, M.D.,
Miami.

One can but briefly sketch, in the time allotted, the interrelationship between ophthalmology and the special departments into which medicine today is divided. It would take many volumes to go into detail and is far beyond the scope of this paper and the writer's ability.

Outside of the individuals who are directly referred by former patients, practically all the work of the ophthalmologist is that referred by conferes in other branches of medicine.

Why does an individual consult an ophthalmologist? The usual reasons are:

(a) Headaches, localized or general
(b) Visual defects
(c) Discomfort after use of eyes
(d) Inflammation of lids or eyes
(e) Strabismus
(f) Ocular injuries

For these same reasons patients consult their family doctor for information as to what to do in case of eye trouble.

(a) Headaches of ocular origin are, in most instances, due to errors in refraction, usually hyperopia, hyperopic astigmatism, compound hyperopic astigmatism or mixed astigmatism. Headaches are not the rule with myopia or compound myopic astigmatism. Localized headaches may result from imbalance of the extrinsic ocular muscles alone. However, exophoria, hyperphoria, esophoria, or associated phorias in conjunction with errors in refraction are more prone to cause localized headaches.

If the sufferer is in otherwise good physical condition the wearing of lenses, correcting the error in refraction, orthoptic exercises to overcome the muscle imbalance, prisms to correct the same, or operative procedures in extreme cases, usually bring about relief. If the above measures do not mitigate the symptoms a search for causative factors must be made—i.e., a thorough physical examination which may require the aid of the internist, neurologist, rhinologist, roentgenologist, urologist, gynecologist or orthopedist or all of them.

(b) Poor, blurred or failing vision may be due to congenital ocular defects, errors in refraction, external disease of the eye (due to systemic diseases, such as interstitial keratitis in congenital or acquired lues, etc.), beginning lenticular opacities; vitreous opacities, various forms of retinitis, intraocular hemorrhage, chorio-retinitis, optic neuritis and glaucoma. In all such conditions, except errors in refraction and muscle imbalance, search must be made for the etiologic factor.

(c) Discomfort after use of eyes is usually due to errors in refraction or muscle imbalance, causing eye strain. Ocular discomfort after close use is also frequently observed in general asthenia.

(d) Superficially congested or inflamed lids and eyes may be due to eye strain, or to chronic infection of the meibomian glands of the lids or to palpebral and bulbar conjunctival infection.

Refraction and examination of smears and cultures from the ocular secretions will usually determine the cause.

Deep seated inflammation of the eyes with pain, is usually due to profound bacterial infections of the conjunctiva, corneal ulcers, scleritis, iritis, uveitis, and inflammatory glaucoma; also secondary to ocular injuries. In the first two mentioned the etiologic factor must be sought for by the bacteriologist; in the last four, by a thorough physical examination.

(e) Strabismus usually is self-evident and, if not paretic in origin, care of errors in refraction, orthoptic exercises and, as a last resort, surgery will usually bring about correction of the defect. In paretic cases surgery as a rule must be employed. Treatment of squint in children should be instituted immediately the defect is noticed, as glasses and orthoptic exercises, if started early, will frequently obviate operation measures.

(f) Ocular injuries, even if slight, are not infrequently complicated by corneal ulcers, iritis,

*Read before the Sixty-first Annual Meeting of the Florida Medical Association, Jacksonville, April 30, May 1 and 2, 1934.

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uveitis and secondary glaucoma, due to local infection or to the influence of foci of infection in the sinuses, teeth, tonsils, alimentary tract, pelvis or prostate; hence the need for cooperation in search for the cause.

The greatest number of patients are naturally referred to the ophthalmologist by the internist, pediatrician, neurologist and otorhinologist. The industrial surgeon, syphilographer, brain surgeon, obstetrician and orthopedist probably follow next in order in the number of cases referred.

The internist, pediatrician, neurologist, brain surgeon and otologist are, as a rule, proficient in the use of the ophthalmoscope and, if no gross fundus pathology is found to account for their patients' symptoms, they are referred to the ophthalmologist for a check-up on errors in refraction, muscle imbalance, slit lamp examination, field of vision and ophthalmoscopy.

The industrial surgeon usually refers all but minor eye injuries for treatment to the eye surgeon.

The syphilographer wishes information as to the appearance of the external eye, condition of extrinsic and intrinsic musculature, the permeability of the refractive media, the fundus findings, the size of the form and color fields and the relative size of the blind spot, before instituting treatment.

The obstetrician, unless expert with the ophthalmoscope, desires information as to the condition of the fundus in cases showing albuminuria to determine if neuroretinitis of pregnancy exists.

In increased intracranial tension and pituitary disturbances the brain surgeon relies to a large extent on the ophthalmoscopic and the perimetric findings in deciding upon operative procedures.

The orthopedist frequently refers patients with wry neck and spinal curvature, etc., to determine if the eyes may not be an etiologic factor in their production.

In turn the vast majority of the cases referred by former patients must be re-referred to practitioners in other branches of medicine for aid in determining and confirming a tentative diagnosis made by the ophthalmologist. These include, and from the writer's observation are of greatest help in such confirmation, in the order named:

1. Internist and Pediatrician
2. Neurologist
3. Otorhinolaryngologist
4. Bacteriologist and Pathologist
5. Syphilographer and Dermatologist
6. Roentgenologist
7. Urologist
8. Gynecologist
9. Brain Surgeon
10. Oral Surgeon
11. Orthopedist
12. General Surgeon.

In case careful correction of errors in refraction and muscle imbalance do not relieve localized or general headaches or there is found pathology in the refractive media or there exist fundus lesions, we go to the internist and pediatrician for help to discover any systemic condition which may account for the continuance of symptoms.

Careful checking of the circulatory and nervous systems, alimentary tract, urinary tract, kidney function, ear, nose, throat, pelvis, skeletal system, complete blood count and blood chemistry, with Wassermann and Kahn tests not infrequently reveals conditions which aggravate mild ocular defect or are the etiologic factors themselves.

Eye strain alone, due to errors in refraction and muscle imbalance, may cause anorexia, nausea or vomiting, vertigo and epileptoid seizures. The neurologist must help us out here and also in many anomalies and acquired defects in the extrinsic and intrinsic ocular muscles.

The otorhinolaryngologist must eliminate the ear in many ocular muscle defects, especially nystagmus and in some cases of pathologic fundus findings. Disease of the accessory sinuses is a factor in accommodation troubles and in acute and inflammatory conditions of the anterior segment of the eye, the vitreous body, retina, choroid and optic nerve. Infected tonsils are also important sources of systemic toxemia which may manifest itself in the eye as episcleritis, scleritis, or an irritable uveal tract or even retrobulbar neuritis.

The various infections of the external eye require the help of the bacteriologist, who, by examination of smears and cultures, determines the character of the infection and so enables one to apply appropriate treatment.

The pathologist is relied upon for the diagnosis in sections of tumors of the lids, orbital and intraocular growths.

Dermatitis and eczema of the lids, pemphigus and herpes zoster which occasionally attack the eyes by extension, keratosis and epitheliomata of the lids all should have the care of the dermatologist. Likewise, in eye conditions the result of congenital or acquired lues, the systemic treatment should be carried out by the syphilographer.

All penetrating injuries of the eyes should be sent to the roentgenologist to determine if there

is any foreign body within the eye and, if so, to localize same as an aid in its extraction, if magnetic, by means of the magnet. In certain cases of inflammation of the optic nerve knowledge as to the condition of the accessory sinuses is most important, as well as the size of the optic foramini. Impacted molars and apical infection of the teeth must be eliminated in many inflammatory eye conditions. In visual field disturbances, especially with color field changes and enlarged blind spots, the continuity of the sella turcici must be known.

Recurrent episcleritis, scleritis, iritis and chronic low grade inflammation of the uveal tract with vitreous opacities, which do not respond to local treatment usually improve rapidly after clearing up prostatic or cervical and uterine inflammation and infections; hence our dependence on the urologist and gynecologist. Vaccines made from cultures of the secretions from these organs occasionally are necessary to bring about improvement or complete relief.

The brain surgeon is the final resort in conditions where eye symptoms point to increased intracranial tension.

Occasionally impacted teeth, especially in arrested development of the superior maxilla, produce symptoms which manifest themselves as apparent eye strain and relief is only obtained by orthodontal procedures or extraction of the offenders. Likewise, apicial infections require the care of the oral surgeon.

Lordosis, especially when combined with scoliosis, is a factor in producing eye strain as a result of the tilting of the head, which changes the level of the visual axes and bring about a hyperphoria and muscle imbalance which is especially annoying in close use of the eyes. Temporary relief is occasionally given by the use of prisms, but correction of the defect by the orthopedic surgeon, when possible, allows the individual usually to discard the prisms.

The general surgeon is the court of last appeal in removal of sources of infection in the chest and abdominal cavity.

From the above, it must be very apparent the extremely close relationship between ophthalmology and the many special divisions of medicine, and how impossible to give relief to our patients without the fullest cooperation.

Nor are the other departments of medicine entirely independent of the eye man in completing a diagnosis or discovering the first symptoms of some impending or incipient disease. This is especially true in some kidney lesions, the first symptom being blurred vision. The ophthalmoscope here discovers the beginning evidence of albuminuric retinitis. Many cases of diabetes are spotted by the eye man because of the frequent marked changes found necessary in the lenses correcting errors in refraction, as well as evidence of beginning lenticular opacities and diabetic retinitis.

Medicine is a wonderful science, possibly not exact, in our day, but the ability to discover the cause and alleviate the suffering of our fellow men is a God-given privilege in which cooperation among its votaries is most essential.

DISCUSSION

Dr. Shaler Richardson, Jacksonville:

I enjoyed reading Dr. Black's paper very much because I think it shows the very close relationship between all branches of medicine and ophthalmology.

Concerning intracranial lesions, I feel that the ophthalmologist's study of these conditions is so very essential that every brain case or suspected brain case must have a complete ophthalmological study. It is remarkable the number of brain cases that are picked up by the ophthalmologist. Frequently we have patients who consult us complaining of headache and ocular discomfort, and in going over these cases and making the routine ophthalmoscopic examination it is not infrequent that we pick up cases of well advanced papilloedema or even optic nerve changes which have progressed so far as choked discs.

Some few weeks ago a young woman came into my office complaining of a headache. Some years previously she had been a patient of mine for a refracted condition. The headaches were not intense; she simply complained of headache after use of the eyes. Examination showed double choked discs, and this subsequently proved to be an intracranial neoplasm which has recently been operated upon.

Concerning the treatment of syphilitic conditions of the eye, I think it is most important that there be a full cooperation between the syphilographer and the ophthalmologist. In most of these inflammatory conditions of the eye, the use of arsenics in the beginning is contraindicated as it only aggravates the eye condition. I feel that in many of these inflammatory conditions of the eye treated indiscriminately with arsenic in the

beginning, the vision is lost because of this mismanagement of the condition. In all of these cases the use of bismuth and mercury certainly should be concentrated on before any arsenics are used.

I also want to sound a note of warning regarding the use of tryparsamide. For many years there has been developed a condition of contraction in the fields by the use of tryparsamide. The question is whether the very marked contraction one sees in many cases of neurosyphilis treated with tryparsamide is actually due to atrophy of the nerve as a result of syphilis, or to the use of the drug. However, there is no question about it; many of these neurosyphilitic cases treated actively with tryparsamide develop very suddenly a marked contraction of the field of vision, and I don't think that any case of neurosyphilis should be treated with tryparsamide without a constant watching of the fields of vision.

We all lay ourselves open to malpractice suits, and not so long since such a suit was begun in this community. Therefore if we watch the fields closely we are protecting ourselves.

I want to thank you for being able to present this paper of Dr. Black's. I hate to see a program go by without an eye, ear, nose and throat paper, and this was the only paper on this particular subject.

SURGICAL MANAGEMENT OF THYROTOXICOSIS*

JOHN S. HELMS, JR., M.D.,
Tampa.

HISTORICAL

Willard Bartlett has said that we have every reason to believe that goiter is as old as the human race. With very slight reservation this is probably a true and accurate estimation of the age of this most intriguing condition.

Contrary to an almost universal lay belief, operative removal of the thyroid is no longer a procedure in its late infancy but long ago became a standardized surgical practice. Nearly one thousand years ago Albucasis attempted the surgical removal of a goiter and hinted of some previous similar adventure of his or one of his contemporaries.

Somewhat more than nine hundred years later one hundred and six authentic cases had been reported, the majority of which were done prior to the introduction of ether in 1846. The performance of thyroidectomy without adequate anesthesia seems almost inconceivable to us who now have so many anesthetics from which to choose.

It must have been with indomitable courage that the pioneers in thyroid surgery were endowed to tread in such a vulnerable region under such adverse circumstances. The names of Desault and Hodenus should not go unmentioned as outstanding figures up to the time of Kocher, the master. Then, about 1883, began the so-called present era in thyroid surgery during which Kocher, Halsted, C. H. Mayo and George Crile have played the major roles.

MORTALITY

A mortality of twenty to forty per cent must have been most discouraging to even those stout-hearted surgeons of the pre-antiseptic days, who so valiantly blazed the way for the brilliant results of today. With the advent of "Listerism" came a most astounding drop in the mortality rate to between two and eight per cent, until today, the era of asepsis, it is most generally well under one per cent.

ETIOLOGY

For some years there has been more or less agreement among most clinicians of experience that the group of clinical syndromes which point to an alteration of the normal function of the thyroid gland with the production of toxic symptoms may possibly be due to either one, or both, of two conditions; namely:

(1) pure hyperthyroidism, in which there is an excessive secretion of a normal hormone, or

(2) the elaboration of a chemically altered hormone, or

(3) a combination of the two.

The term "thyrotoxicosis" is herein applied to the constitutional state produced by any of these conditions and consequently includes those cases of exophthalmic goiter (Graves' or Basedow's disease) and adenomata with toxicity.

In 1926 George Crile injected the adrenal factor into the hyperthyroid picture and showed very convincingly that hyperadrenalism if not "the" exciting cause of so-called hyperthyroidism was at least intimately dovetailed with it. Marine believes the primary defect to be in the adrenal cortex, the effect of which removes the inhibitory action of these endocrines over the thyroid. Others have indicated a close relation-

*Read before the Sixty-first Annual Meeting of the Florida Medical Association, Jacksonville, April 30, May 1 and 2, 1934.

ship between such glands as the gonads, pituitary and thyroid. These do not, however, minimize the part played by the thyroid or detract from the importance of the hypotheses concerning the nature of the thyroid secretion.

Following the isolation of thyroxin by Kendall in 1914 he discovered the scarcity of iodine in hyperplastic glands. The role of iodine in producing a return toward normal of the anatomically and physiologically deranged thyroid is not clear, particularly since there is no apparent relation between the advent of the disease and iodine deficiency. Therefore, notwithstanding the advances made in the study of the anatomical structure as well as the pathologic physiology associated with thyrotoxicosis, the basic etiologic factor remains undiscovered and Graves' disease continues to be one of our most baffling medical and surgical problems.

PATHOLOGY

The morbid anatomy of the thyroid in Graves' disease and toxic adenomata is fundamentally the same—hyperplasia of the follicular epithelium. In the former it is diffuse, in the latter it may be diffuse but most frequently is limited, and may be encapsulated or non-encapsulated. The diffuse adenomatous type is more correctly called "adenomatosis."

There occasionally is a total lack of epithelial hyperplasia in a patient presenting symptoms of severe thyrotoxicosis, particularly after prolonged iodine therapy.

On the basis of pathology there is no justifiable reason for the distinction clinically between toxic and non-toxic adenomata or between exophthalmic goiter and toxic adenoma. The difference is in degree of change and not in kind.

DIAGNOSIS

It is no difficult matter to arrive at the correct diagnosis in the usual type of thyrotoxic patient with either Graves' disease or adenoma with toxic manifestations. These patients are far more frequently recognized than missed. In the Graves' type there is the diffuse, uniform enlargement of the gland, the tremor, palpitation, tachycardia, muscular weakness, restlessness, loss of weight, sweating, exophthalmos and increased metabolism in addition to innumerable other less well known but fairly constant signs, all developing in a relatively young person in a period of three to six months. As opposed to this group of symptoms, possibly in degree rather than kind, are the manifestations of the clinical type commonly spoken of as toxic adenoma. The patient is relatively older, the symptoms of a more chronic nature, the gland usually nodular, the metabolism lower and the other signs and symptoms proportionately less severe, with the possible exception of the cardiovascular mechanism which has borne the brunt of the disease, due chiefly to its protracted course. It has been my observation that the metabolic measurements in our patients in Florida, even the severely toxic ones, are on an average considerably below those reported in other sections.

A little less easy to recognize is the acute fulminating type which frequently terminates fatally, and the cardiovascular type in which the markedly rapid heart predominates.

Perhaps those larval forms which present most of the usual signs and symptoms of a moderate or severe thyrotoxic state but consistently maintain a metabolism which is normal or subnormal are the ones that tax the ingenuity of the clinical diagnostician to the utmost. These are the patients who, were it not for the telltale goiter, would be relegated to the group of psycho-neurotics and become the football of the local medical fraternity.

Of the clinical laboratory procedures available for use in the study of thyrotoxic patients the metabolism test, of course, holds first place in importance. By an accurate estimation of the basal metabolism correlated with the physical signs and symptoms, one may be reasonably sure in most instances that he is, or is not, dealing with a thyrotoxic patient.

The blood picture is of some value, there being typically a lymphocytosis.

In recent months there has been developed a practical method for the determination of the iodine content of the blood. Curtis, Davis and Phillips have shown that the normal blood iodine content is remarkably constant and that in thyrotoxicosis, whether of the exophthalmic type or the adenomatous type, the iodine content of the blood is definitely increased. If this procedure proves to be as reliable as is indicated by this early work it will be a most valuable addition to the clinicians' diagnostic aids.

TREATMENT

While it is true that the fundamental pathologic physiology of thyrotoxicosis, both of the Graves' type and that of the adenoma, is as yet very poorly

understood, surgical attack directly upon the thyroid remains as the sheet anchor in the treatment of both classes.

It is undoubtedly true that a certain small per cent of these patients, particularly those with the larval or incipient type, will respond favorably and permanently to rest and iodine medication; nevertheless, this is probably not justifiable in more than a small per cent because of the possibility of fanning an already impending conflagration.

Ever since the introduction of iodine by Plummer in 1922 for the preoperative treatment of Graves' disease the question of using this drug in the adenomatous cases has been an open one. There remains little doubt that symptoms due to toxic adenoma far less frequently subside than do those caused by Graves' disease as a result of iodine medication. However, because of the similarity of the fundamental morbid anatomy and because of the likeness of the symptoms and because an appreciable number of adenomas do respond favorably to this drug it is my personal opinion that it should be used, particularly in the acute cases, in the preparation of these patients for operation in the same manner as in Graves' disease.

I shall not enumerate the details of the preoperative preparation but shall only emphasize a few of the most important. It would be difficult indeed to say which is of major importance, rest and quiet, or iodine. Both are absolutely essential in the average case. The choice of iodine preparations is probably of minor importance provided one is selected in which the iodine is readily available. Compound solution of iodine (Lugol's solution) is universally applicable and I have found it satisfactory for both oral and intravenous use.

In the average case it has been my custom to start with small doses, say two or three minims three times daily and increase two or three minims each dose daily until as much as fifteen or twenty minims or more are given at each dose.

In those patients who are particularly refractory to iodine (so-called iodine fast) for one reason or another, a period of complete rest in bed with a high caloric diet for several weeks, or months if necessary, followed by the resumption of iodine will usually be followed by favorable results. The intravenous route is particularly adaptable to these patients and may be used with comparative safety if the solution is well diluted. Ten minims of Lugol's solution added to 500 or 1000 cubic centimeters of normal saline solution containing 5% glucose may safely be given three times a day using the same precautions as in giving any other intravenous medication. Under this routine even the most stubborn cases will frequently respond much more rapidly than under oral medication.

The next question of importance is when to operate upon these patients. In the vast majority of those who have not received iodine before, the optimum time will be between eight and fourteen days following institution of iodine treatment, but not infrequently a longer time than this is required, particularly if iodine is given according to the small, ascending dose method as outlined. Frequent metabolism tests should be made and the operation should be done, regardless of the time, at the peak, or if it can be reasonably ascertained just before the peak is reached under preoperative medical treatment.

The anesthetic is most frequently a matter of the individual surgeon's choice. Personally I believe that satisfactory anesthesia can be obtained by adequate preoperative sedation with one of the barbiturates such as pento-barbital sodium followed by nitrous oxide gas, occasionally supplemented by novocain and adrenalin locally.

The actual technique of the operation is so well standardized and so adequately described in innumerable textbooks of surgery that I shall merely touch upon a few points of major importance.

The Boekel collar incision, almost universally credited to Kocher, is applicable in all but the most unusual cases. It is important that this be lengthy enough to provide adequate exposure, which is of extreme importance. In addition to this the midribbon muscle split of Kocher, the Halsted treatment of the upper pole, Milkulicz's subtotal resection of the lateral lobes and Mayo's bilateral procedure have stood the test of time and remain today as undisputed points in technique.

Regardless of the degree to which thyroidectomy has been standardized each case is an individual one and should, of course, be so handled. Every operator should be prepared to vary his technique to fit the occasional case in which the usual procedure would be unsuited. Careful hemostasis is most important and extreme delicacy and care are paramount.

COMPLICATIONS

Thyroidectomy is perhaps fraught with as many and as formidable potential complications as any major surgical procedure. It is only necessary to mention such adjacent or contiguous structures as the carotid arteries, the internal jugular veins, the recurrent laryngeal nerves and the parathyroids posteriorly, and the trachea and esophagus medially, to impress upon one the danger of hasty or careless surgery and the absolute necessity for extreme care. The immediate postoperative care of these patients is most important even though comparatively simple. The absolute prohibition of visitors, morphine for pain or restlessness, iodine and fluids by rectum at first, then orally, and the ice bag over the precordium constitute the usual routine.

RESULTS OF SURGERY

The rapidity with which the average thyroidectomized patient responds favorably to surgery, particularly in the type with Graves' syndrome, is little short of miraculous. Within two or three days as a rule, and nearly always within a week, practically all of the cardinal signs and symptoms have diminished with the exception of the exophthalmos, and even this occasionally begins in a week or less. The patient rapidly strengthens and is able and anxious to become active, but should be warned against returning to any occupation in which the mental or physical strain is at all great for a period of at least several months and should be protected from any factor which may possibly have had a part in the initiation of the dysfunction. It has been rather definitely shown that the average patient with Graves' disease, even under the most favorable circumstances, fails to regain a normal physiological status under one year from the time of operation.

RECURRENCE

Recurrence is defined as gland hypertrophy and hyperplasia with return of symptoms following radical treatment and freedom from symptoms.

Recurrence is much more common in adenomatous glands but occurs in the exophthalmic type in possibly two per cent of cases, and in both types much more frequently in younger patients than in those over forty years of age.

Recurrences shall probably become fewer and thyroidectomy more ideal as a means of curing the thyrotoxic patient as more and more surgeons realize that it is perhaps wiser to remove too much than too little of the gland.

SUMMARY

1. The basic etiology of thyrotoxicosis remains unknown.

2. The fundamental morbid anatomy in Graves' disease and in toxic and non-toxic adenoma is extremely similar.

3. The determination of the iodine content of the blood may become a useful diagnostic procedure when correlated with the clinical features and metabolism test.

4. Treatment is essentially adequate surgery preceded by adequate preparation and followed by extreme care over a period of years.

5. The chief immediate dangers of surgery are hemorrhage, vocal cord paralysis and injury to the parathyroids.

6. Recurrences shall probably be more uncommon as more adequate surgery is done.

BIBLIOGRAPHY

1. Bartlett, Willard: The Surgical Treatment of Goiter, 1926. C. V. Mosby Company.

2. Boyd, William: Textbook of Pathology, 1932. Lea & Febiger.

3. Crile, G. W.: The Adrenal Factor in Hyperthyroidism. Surg., Gynec. and Obst. 48: 371-374 (March) 1929.

4. Curtis, G. M., Davis, C. B. and Phillips, F. J.: Significance of the iodine content of human blood. J.A.M.A. 101: 901-905 (Sept. 16) 1933.

5. Eberts, E. M., Fitzgerald, R. R. and Silver, P. G.: Surgical diseases of the Thyroid Gland, 1929. Lea & Febiger.

6. Rienhoff, Jr., W. F.: Treatment of Hyperthyroidism. Dean Lewis' Practice of Surgery, Vol. VI, Chapter 1, W. F. Prior Co.

DISCUSSION

Dr. F. J. Waas, Jacksonville:

Dr. Helms certainly has developed a very excellent paper on the history, etiology, diagnosis and surgical treatment of thyrotoxicosis. I am very much impressed with his paper.

Relative to the use of Lugol's solution: When you take into consideration the effect that iodine has of producing involutional changes in the thyroid gland, in other words, developing an entirely different histopathological aspect of the gland, I think it behooves us to be a little bit cautious or to act cautiously in advising iodine. It is a generally accepted fact that iodine has the faculty of stimulating lymphoid hyperplasia. The standard method of ten drops three times a day for eight or ten days will properly safeguard these cases for a more or less successful surgical procedure. It is more or less accepted that it is quite possible to drive a simple non-toxic adenoma to the operating table with symptoms of acute thyrotoxicosis due to the excessive and indiscriminate use of iodine. The symptoms of

acute thyrotoxicosis may be inadvertently due to hyper-iodism. Dr. Crile has justly said that it is possible to produce hyper-iodism and that the symptoms under these circumstances are practically parallel with symptoms of acute thyrotoxicosis.

In the post-operative care, I have not found it necessary to resort to the intravenous use of iodine. However, I have found one excellent method that I do not believe Dr. Helms' has mentioned; that is to give Lugol's solution as hypodermoclysis on the table. I use 4 cc. of Lugol's solution to a thousand cc. of salt solution, and I find this procedure will stabilize the patient for two or three days following the operation, and after that time I think it is best to give Lugol's solution by mouth.

Dr. Helms speaks of the basal metabolism. I do not know how much dependence can be placed on the basal metabolism as so many psychic factors enter into the picture to influence the metabolic output. Absolute quiet and happy surroundings are among the most important factors in estimating basal metabolism. The patient should not be excited and every effort should be put forth to simulate a picture of absolute quiet.

Dr. Helms mentioned the difficulty sometimes in reaching a diagnosis of exophthalmic thyroid. It is not always easy to establish such a diagnosis. I have a patient in St. Vincent's Hospital at the present time who was referred to me by one of our internists with the diagnosis of exophthalmic goiter. Two days after admission to the hospital she showed a basal metabolism of minus 20. The following day a basal metabolism of plus 7. Patient only showed slight evidence of exophthalmus but she was very much excited, rather activated. She showed more or less definite tachycardia, but I was not able to palpate a resistant thyroid gland. It is a question in my mind as to whether I will be able to put this patient within the caption of exophthalmic thyroid. One could consider the activated type as spoken of by Dr. Lahey of Boston. However, I feel that I will be inclined to put this patient within the category of neuro-circulatory asthenia so ably described by Dr. Crile. I mentioned this case with the idea of emphasizing the point Dr. Helms brought out—that it is not always easy to make a diagnosis of exophthalmic goiter.

Thyroid surgery is one phase of surgery that needs the absolute cooperation of the internist and surgeon.

Doctor, I certainly enjoyed your paper and appreciate the privilege of discussing it.

Dr. James M. Hoffman, Pensacola:

The paper of Dr. Helms presents a very comprehensive summary of the "high spots" in this vast subject. The very interesting microscopic pathology of this condition could be discussed for hours. We must remember that the toxic thyroid creates an imbalance in our endocrine system and I would like to call your attention to the thymic hyperplasia which usually is present and may be responsible for some of our operative thyroid deaths. The secondary cardiac pathology is also most interesting to study. These cardiac changes may be due to pressure effects which usually affect the right ventricle by pressure on the trachea or bronchii with consequent emphysema or a chronic passive congestion, by direct pressure on the veins. The true goiter heart however is distinctly thyrotoxic with the train of pathologic changes in the heart muscle which is another big factor in the production of the operative mortality. Do not overlook cancer. In the outlining of any plan of treatment these factors should be considered. We should ever have in mind these autopsy experiences, which would serve us in delineating a safe course of procedure in these cases.

Fortunately, in Pensacola, we see relatively few cases of true thyrotoxicosis. The success of our operative procedure in my opinion is almost in direct ratio to the care exercised in our preoperative management. A good maxim to follow is never to operate on a thyroid on a rising metabolic rate. In my own experience I have seen excellent results follow the judicious use of preoperative radiation in stubborn cases. I personally prefer radium to x-ray and have not seen the excessive amount of adhesions at operation when radiation was carefully administered.

In the actual operative technique let me emphasize again the necessity of adequate removal. Recurrences are invariably the result of allowing too much thyroid tissue to remain but it is not my intention to minimize the dangers of careless technic in this region.

The proximity of the very important structures to the posterior capsule and the inferior thyroid artery has been called to your attention in Dr. Helms' paper. The surgeon in operation on a thyroid must not only be thoroughly conversant with the anatomy and physiology of the area,

but must exercise extreme care, more so than in other operative fields.

In conclusion, I feel that the handling of the surgical thyroid is an individual problem. Each case must be studied on its own merits and the procedure in treatment be outlined with a full knowledge of the pathologic and physiologic variation that present themselves in each individual case.

Dr. J. S. Helms, Jr., Tampa (Concluding):

Perhaps one of the most interesting phases of this question is the etiology. Dr. Crile's theory, as I understand it, is that at times at least it is one of the neurogenic diseases and may be cured by adrenalectomy in certain selected cases. He has shown or stated that he has cured nineteen cases of hyperthyroidism by adrenalectomy without operating upon the thyroid. Most men, I think, will be a little hesitant to accept that, although he has rather definitely shown it. The interesting thing is that he feels the adrenal sympathetic system is probably responsible in quite a large percentage of cases of hyperthyroidism.

SOME INTERESTING PHASES IN THE PRACTICE OF PROCTOLOGY*

JACK HALTON, M.D.,
Tampa.

We hear from such reliable sources as students of Biblical history and of ancient tongues that one of the seven plagues of the Egyptians was the plague of hemorrhoids. It is certainly not my intention to trace for you the history of the practice of proctology from such ancient days. Suffice it to say, that whatever may have been its standing as a branch of medicine in the days of the Ptolemys, or even in the days of Rome's splendor, the practice did fall into disrepute. This now recognized specialty was, in the beginning, associated in the minds of the profession with the practice of charlatans and quacks to a degree which for years handicapped its development. This limited its membership, because of the suspicion with which they were regarded, to those intensely optimistic men of far vision and pioneer metal who could work, satisfied with some progress, and who were spurred on rather than hampered by the opposition of the medical fraternity as a whole.

I will show you that this lack of understanding has, in a large measure, opened the way for the exploitation of this branch of medical science in a degree greater and more shameful than that suffered by any other specialty. I will point out to you how this invasion of the practice of medicine by fakers and insufficiently educated men is at once acquiesced in—even fostered and promoted by—the very men who would be the first, in any specialty of which they had more knowledge, to stop the invasion of this army of cheats. In other words, the ethical men of our county societies, of the American Medical Association, are admitting into their offices the so-called experts (salesmen really) those of the electrical and instrumental supply houses advertising specialists of the so-denominated colleges of proctology, and societies for the promotion of ambulant proctology whose aim is the commercialization of this work and the sale of remedies.

It shall also be my purpose to state, briefly, the scope of this specialty; to show it legitimately divided into two distinct schools, which are, nevertheless, reconcilable since their aims are the same (*i. e.*, the school which swears by surgery, and that which swears at it and will treat only by injection, application, etc.); and to show that each method has its rightful place and how it is to be distinguished.

In conclusion, I will present for your consideration, in slides made from x-ray films, the result of the practical application of method to a condition fairly frequent, sometimes unrecognized, sometimes mis-diagnosed, always progressive, almost never helped by ordinary methods used by the general practitioner, usually neglected until the patient is in dire straits, yet generally amenable to one form of treatment which is not surgery, for surgery would condemn the patient to discomfort ended only by death.

Proctology, or the treatment of rectal pathology, is a practically new specialty. That is to say, that while for long years men have confined themselves to the treatment of diseases of the "other end" and kings and commoners alike have sought them out for such relief as they, almost alone of the Brethren, knew how to give, there was a great deal of aversion to its practice. The man who chose it was regarded with so much suspicion, that men of standing avoided recognition of the insistent need for definite knowledge of the anatomy and pathology of that part of the body. They examined with reluctance conditions so patently pathological that they could not avoid at least some attempt at palliative

*Read before Fourteenth Annual Meeting Florida Railway Surgeons' Association, Hollywood, May 1, 1933.

treatment, and especially opposed any non-operative treatment, since the opposition of the general surgeon to other than radical treatment for these cases was marked.

About fifty years ago a change in attitude towards study in this particular line became apparent. I quote Walter Fansler, F.A.C.S., Professor of Surgery, University of Minnesota, an active Fellow and a past president of the American Proctologic Society:

"With rectal diseases neglected or poorly treated by the profession the field was ripe for any one offering a method which avoided operation. About 1891 the injection method for treatment of hemorrhoids came into being. It was heralded as a bloodless, painless, non-surgical method of cure. Even as crudely as it was done, I think I would rather have taken a chance on the injection than on the surgery as it was done at that time, in fact, than upon some of the (rectal) surgery I have seen more recently. The surgeons at once decried this method, and since the general practitioner and interne usually referred rectal cases to the surgeon for operation, they were influenced by the surgeon's opinion and fell into line. It was the usual 'dog in the manger' attitude. They condemned this method without adequate investigation and refused to develop their own surgical treatment to a point where it compared favorably in technique and results to surgery done on other parts of the body. You may not agree with the injection treatment of hemorrhoids but there is no doubt that from this method came the real beginning of the development of the specialty of proctology as a distinct branch of medicine."

You may be very certain that the reluctance of the general practitioner to examine the rectum, or to recognize symptoms of rectal pathology, his indifference to the need for a study of diseased conditions of the rectum, his aversion to discussion of treatments and refusal to examine into the merits of methods developed by the persistence of a few hardy pioneers in the work, opened wide the door of opportunity to a type of adventurer still numerous, still noticeably prosperous even in these years of depression. I refer to the "pile specialist," who with his advertising, secret formulae, guaranteed cure, and absolute disregard of the most elementary ethics of the profession, invaded every city and town, some only temporarily until the harvest was reaped, some—alas!—to flourish, although viewed with distaste. Well-equipped and most profitable institutions sprang up under the very windows of those ethical and conservative physicians whose sensitive noses, atip to an odor which they ascribe to all of the tribe, failed to differentiate between those at fault and those whose licenses to do the same work, if in other manner, are preserved in cleanly places.

Yet it is among these ethical men and their families, who know not where to find relief among those of their own kind, that the irregular gets many of his patients. I refer to places like the much-advertised Rectal Institute. It is to the irregular, to the members of so-called "colleges of ambulant proctology," pandering to the commercial side of proctology, or to institutions fostered by them, that the ethical general practitioner has recourse when he desires to learn something about rectal work. For these men, with their generous offers of clinic instruction, secret methods and formulae, guarantees of success, and, in these days of hard won money, increased cash practice, raise their voices and make themselves known and accessible; while in few places and very quietly the ethical proctologist mumbles into his sleeve of the happy results of his pet treatments or long research, and hopes, wistfully, that he may find someone, sometime, who'd be a little bit interested in some of the things he is doing.

In spite of the suspicion, owing to the activity of the irregulars, with which every honest proctologist was regarded, a few of the hardier souls among those interested in the new specialty got together and in 1899 formed an ethical organization for the dissemination of information and protection of members doing rectal work. Since then, with membership carefully restricted to the few whose work lies entirely in this field and is of sufficient merit to win approval after all requirements of education and practical experience and time of probation have been met, the American Proctologic Society has won for the specialty, and for itself, a distinct place and recognition as a section of the American Medical Association.

Yet, because of its very conservatism the way has remained open for representatives of unethical societies, representatives and salesmen from various electrical and instrument supply houses and makers of therapeutic products to abuse the confidence of the layman, the uninformed medical man, occasionally the ethical institution, through the assumption of knowledge and authority they do not possess.

It comes to my mind, as an instance of the way

these people work, that a member of my own county society on occasion sent to his fellow-members announcements of the intended visit of a certain specialist or expert in the treatment of rectal conditions by the electro-therapeutic method, inviting them to be present at a clinic which he would hold for their instruction. The possibilities drew my attention and I went, on the day set, all primed for some fun (I have watched these babies for years)—to find myself confronting a self-styled expert whose establishment of a physiotherapeutic institution in Tampa was so run as to earn the condemnation of his confreres and resulted in his expulsion from the county society. Later he had affiliated himself with a manufacturer of electrical apparatus. He had the effrontery to suggest, when I penetrated a disguise of whiskers and addressed him by his rightful name, that he could teach me a lot of new methods and, most wonderful of all, how to triple my income. Yet, after I had exposed the man to the members of my own county and neighboring county societies, a member of a neighboring county society furnished clinic material and office to this man, and, I judge, paid for a machine to use on his patients and for a course of instruction as well. Many of these patients so treated come my way eventually, which is a satisfaction—if you look at it that way—but there's not so much fun in patching up a bungled job. The patient is nervous, he has lost faith in anyone's ability to cure him, and comes only because he is seeking desperately for some—any—relief. And he is, by that time, short of funds and not sure anyhow that he ought to pay for work that probably won't help him.

As time goes on, more and more conditions which were formerly considered amenable to surgery only are being brought within the scope of the non-confining office treatment. In this category is the treatment of hemorrhoids, by injection, whether by phenol and Wesson oil or by quinine and urea solution, a method satisfactory in every case if the technique is correct; the treatment of fissure, also by quinine and urea injection; pruritus ani, either by Benacol or hydrochloric acid treatment (Haynes method); contracted, or tight, sphincter (divulsion here is not always necessary); proctitis, rectal prolapse. These all respond to office treatment. Your patient is free to be about his business and has no hospital fees to pay. These treatments are practically painless and bloodless—successful treatments. Likewise is the treatment of stricture of the anus and rectum by the application of carbon-dioxide snow, as the slides I will show you will confirm.

All other rectal pathology must be treated surgically. These conditions are, most frequently, external piles, thrombi, skin tags, cryptitis, fistulas, abscesses, condylomas, enlarged valves of Houston, and adenocarcinomas (except under those conditions already too far advanced for operation, when the carbon-dioxide snow treatment will prolong the patient's life in comfort.)

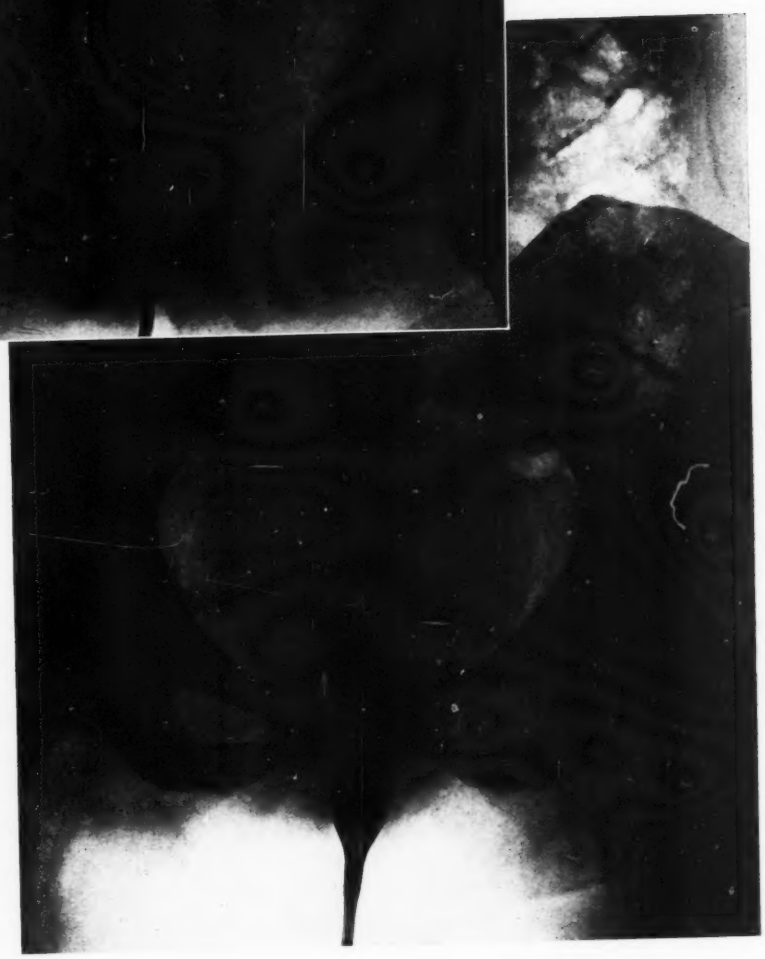
Success in the non-operative treatments lies, not in selection of cases, as many would have you believe, but in thorough mastery of technique and in versatility of the operator in adapting that technique to the individual case.

Ointments, suppositories, oils and jellies are means of temporary relief, not to be ignored, but never to be considered curative; nor by their continued use is the positive treatment of any condition to be neglected.

Again I stress to you the value of early and complete examination of the whole rectal tract whenever there is cause to believe it may reveal some pathology. Would it surprise you to hear that one case of long continued and aggravated twitching of the eyes responded beautifully to treatment for tight sphincter? Nor was that by any means an isolated case. Many patients afflicted with other forms of nervous disease are relieved or improved by attention to rectal conditions of which they never dreamed of complaining. How many times are the cases of painful menstruation the result of sagging colon, or of impacted feces in the rectal pouch? Much of this pain caused by rectal pathology is, apparently, related not at all to that part and unless examination is done, as a matter of routine, conditions which should be corrected are not even seen. That bug-bear of the railroad surgeon, "pain in the back", proceeds in many cases—surprisingly many—from hemorrhoids or other rectal conditions.

Beware of bleeding from the rectum. Many patients neglect it for a long period before reporting to their physicians for examination. Then, if the physician is not versed in the use of the proctoscope and sigmoidoscope, or neglects their use, serious hemorrhage and profound anemia may result before the source of the trouble is discovered. Adenocarcinoma is often unrecognized until it is too late. It is surprising how many cases of so-called "bleeding piles" turn out to be adenocarcinomas; how many times

VIEW I.
Dec. 23, 1932.
Mrs. ———, age 39.
Weight 94 lbs.
Tubular stricture, multiple fistula, duration 20 years.
Laboratory tests negative.



VIEW II.
Jan. 10, 1933.
After 2nd treatment carbon-dioxide snow.
Showing smallest size frigidor through narrowest part of strictured area.

they are polypoid growths. When in doubt, a biopsy should always be done.

In presenting to you these reports on two cases of rectal stricture, I am going to let the pictures speak for themselves, except to tell you I am very much gratified to have been able to get "before and after" records, since it is extremely hard to convince these patients they should continue treatment after they believe they are well.

These cases you see have responded to non-operative treatment by carbon-dioxide snow, a method originated by Dr. E. J. Clemons of Los Angeles, in whose hands it has proved a consistently successful method of permanently relieving patients suffering from anal or rectal stricture, both benign and malignant. The author of this paper is deeply indebted to Dr. Clemons for his patient encouragement and valuable assistance.

My own experience has been so satisfying that for a period of ten years I have not done a single proctotomy, or other form of surgery for these conditions.

Both of these cases were tubular strictures, the more difficult type of stricture to reduce, one of about eight years' and the other of about twenty years' standing. Regarding these prints which I am showing you, a telegram dated April 26, 1933, from Dr. Clemons says: "The prints speak for themselves. Congratulations without further comments."

To sum up will take only a minute. My effort has been to show that the ethical treatment of rectal diseases has been a practice which has grown, in spite of continual conflict with an army of charlatans whose methods have cast a shadow of greed over it; in spite of the disapproval of the general man who could not understand how the seemingly almost miraculous results obtained by the rectal specialist (for these cases do show, occasionally, almost unbelievable results), could be obtained by any legitimate methods; in spite of the natural desire of an uninformed public to be told where to get relief and to be guaranteed a cure.

I have endeavored to show that this specialty, handicapped, still young, little taught, is, in the hands of earnest workers, assuming an ability and an authority in the treatment of all forms of rectal diseases which enables it to devise instruments to fit its peculiar necessities and to produce, as these few slides must example, results that we are modestly proud of and which we hope, not so modestly, to impress upon the minds of the medical profession at large, as consistently possible in the hands of men whose study and devotion to this specialty is their life work.

Credit is due to the following men for the development of the methods noted:

Injection treatment of hemorrhoids by quinine and urea, E. H. Terrell, M. D., Richmond, Va.; by phenol, Collier F. Martin, M. D., Philadelphia, Penna.; by phenol and oil, Marion C. Pruitt, M. D., Atlanta, Ga.

Treatment of anal fissure, Alois B. Graham, M. D., Indianapolis, Ind.

Treatment of benign and malignant strictures by carbon-dioxide snow, E. Jay Clemons, M. D., Los Angeles, Calif.

Treatment of anal pruritus, Granville S. Hanes, M. D., Louisville, Ky.

DISCUSSION

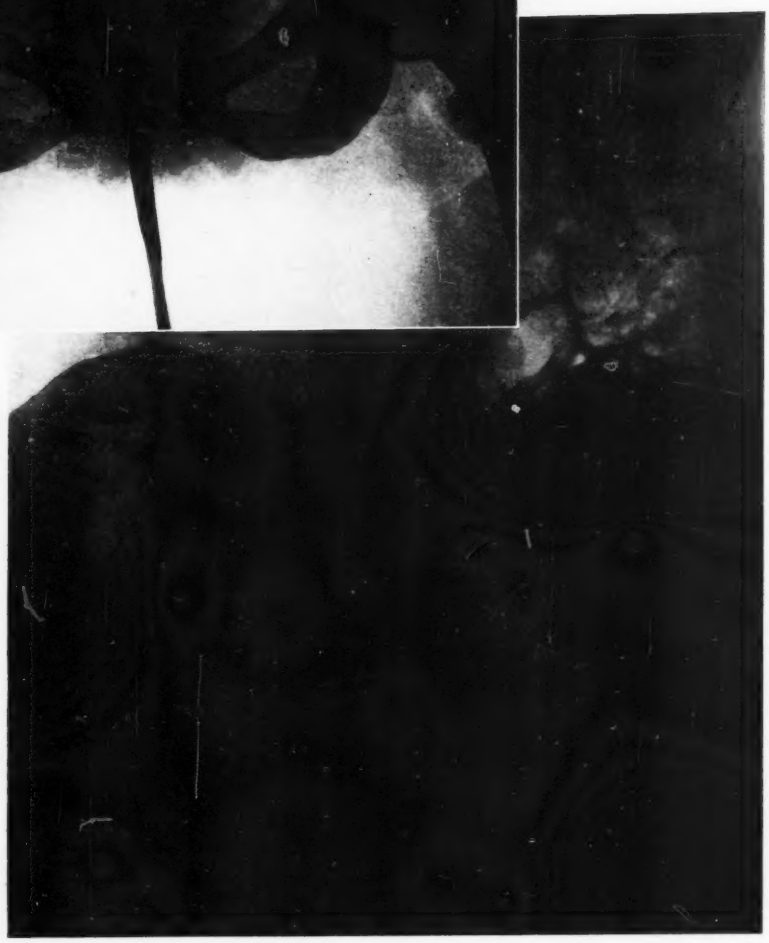
Dr. Leigh F. Robinson, Ft. Lauderdale:

I consider it a privilege to have an opportunity to discuss Dr. Halton's very interesting paper.

Several years ago while an officer in the U. S. Navy I had the good fortune to be placed in charge of a civil hospital in the tropics. As in any general hospital located in the tropics a large percentage of the diseases were referable to the colon and rectum. We had a good staff of physicians and surgeons but it seemed that none of us were sufficiently interested in the patients that had sick colons and rectums. I soon found that the patients whose pathology appeared to be located in the gall-bladder, thyroid, genito-urinary tract, or pelvis were given more thorough examinations and scheduled ahead of the colon and rectal patients. A recapitulation caused me to realize that the slighting of these cases was due to the lack of interest. To correct this I formed a colon and rectal clinic and made it a routine that every such case have proper x-ray studies and sigmoidoscopic examinations. I don't think that in the beginning I particularly enjoyed making proctoscopic examinations, but when I found the vast amount of pathology that could be discovered only by this type of examination, I no longer complained. This was back in 1920, but to this day, although my practice is largely general surgery, I believe that my viewpoint in my rectal and colon work is that of the proctologist.

I think that we are all ready to agree with Dr.

VIEW III.
Feb. 10, 1933.
After 3rd
treatment
carbon-dioxide
snow.
Large frigidor
all the way
through stricture.



VIEW IV.
March 29 1933.
No. 8 Wales
bougie
in situ.
Relaxation
continues.
Patient now
weighs 112 lbs.
Daily stools
normal size.

Halton that the average physician has very little interest in the rectum. As a result it has been difficult for the rectal patient to get the proper consideration of his ailment. It has naturally followed that he sooner or later would fall prey to the methods of quackery. Therefore proctology has offered a fertile field to be exploited by the charlatan and quack. It was back in the early nineties that quackery in diseases of the rectum found its hey-day. At that time the injection treatment came into more general use. It was heralded as bloodless, painless, and non-surgical. No wonder it was popular, because the information gathered from the literature indicates it was probably safer than the rectal surgery being done during this period. It was only natural that these methods of the charlatan would cast suspicion on any ethical physician who might desire to practice proctology. The few honest gentlemen who had specialized in proctology during those years watched the quack become more bold as he continued in his exploitation of the public. Pressed by conditions, these pioneers in modern proctology organized the American Proctologic Society, the object of which is the "investigation and dissemination of knowledge relating to the rectum, anus, and colon." This organization has been able to place the proper importance on the diagnosis and treatment of these diseases. The result has been noteworthy. The charlatan in proctology is gradually disappearing. He is being rapidly replaced by the ethical proctologist in whom both the profession and the public has confidence. In closing let me congratulate Dr. Halton for bringing out so clearly the fact that non-operative procedures have a place in the practice of proctology.

CANCER OF THE LARYNX*

CORNELIUS G. COAKLEY, M.D.,
New York.

Your committee has requested that I discuss the diagnosis and treatment of cancer of the larynx.

Cancer of the larynx may be confined entirely within the larynx involving the vocal cords, ventricular bands or sub-glottic region, in which case we classify it as intrinsic; or it may involve the epiglottis, the ary-epiglottic folds, the pyriform fossae, or the posterior surface of the cricoid. Such cases are known as extrinsic cancer of the larynx. Intrinsic cancer often in the latter stage becomes also extrinsic. The intrinsic cancer occurs more frequently than does the extrinsic. The first and only symptom of an intrinsic cancer of the larynx is an alteration in the voice. This, at first, may be only slightly husky, but after some weeks it is fairly constant and increases to the extent where it is only a whispered voice. As the lumen of the larynx becomes filled up with the gradually increasing mass, there comes a difficulty in breathing and in the later stages so greatly is breathing interfered with that a tracheotomy may be necessary. When ulceration of the malignant tumor occurs pain referred to the ear or mastoid region is a fairly frequent symptom. In my experience many a patient pays little or no attention to the hoarseness and does not apply for treatment until this painful sensation has developed. The progress in many of these intrinsic cases is slow, and it is not at all unusual for a patient to apply for an examination only after several months have elapsed from the on-set of the hoarseness. Laryngologists often make local applications to the thick inflamed cord for weeks or months with no beneficial results to the patient and a consequent loss of valuable time, thus making necessary a more serious and extensive operation to effect a cure.

In cases of intrinsic cancer of the larynx enlargement of the cervical lymph nodes does not occur until either invasion of the cartilage of the larynx has taken place or the disease has extended outside of the larynx and becomes of the extrinsic variety.

In cases of extrinsic cancer of the larynx, the first symptom is usually some interference with the function of swallowing, either the sensation of a slight lump in the throat or else pain on swallowing and pain referred to the ear. Voice changes are not common in the early stages. Inasmuch, therefore, as pain occurs fairly early in extrinsic cases, as compared with the intrinsic variety, these cases are usually seen at a much earlier stage of the disease than those of the intrinsic variety.

Intrinsic Cancer of the Larynx: Any adult who has hoarseness or aphonia lasting more than a couple of weeks should be given to understand that it is a condition the cause of which should be accurately determined. It is rare to have an acute inflammation of the larynx, which also produces hoarseness, last more than a couple of weeks if the individual observes ordinary precau-

*Lecture delivered at First Post-Graduate Medical Course, Gainesville, June 19-24, 1933.

tions in resting the voice. It is therefore absolutely necessary for a complete and thorough examination of the larynx of any patient with huskiness of the voice. There are many intrinsic lesions of the larynx that cause hoarseness, such as acute laryngitis, chronic laryngitis, abscess of the larynx, membranous laryngitis and many other benign tumors, such as hematoma, fibroma, papilloma, polyp, angioma, cyst, lipoma, myoma, chondroma, osteoma and thyroid tumor. Paralysis of one or both vocal cords results in a hoarseness. Finally, tuberculosis and gumma are to be considered as frequent causes of hoarseness.

Inflammatory lesions always present a very different picture, easily differentiated from the tumors and paralysis by the fact that the changes within the larynx are mainly, if not quite, uniform on both sides whether involving the vocal cords or the ventricular bands. Redness, thickening and indurations are always nearly symmetrical on the two sides. On the other hand in the case of benign tumor of the larynx the lesion is limited to one small area of the vocal cord or ventricular band. The rest of the larynx has nearly a normal appearance. These tumors produce hoarseness merely by mechanical interference with the proper approximation of the vocal cords.

There are three lesions, namely, cancer, tuberculosis and gumma, which in their earlier stages, at any rate, are limited to one vocal cord or ventricular band. The opposite side of the larynx presents a normal appearance. It remains then to differentiate between these three lesions. In the case of laryngeal tuberculosis this lesion is one of the late manifestations following a pulmonary tuberculosis, and a thorough physical examination of the chest, an x-ray of the chest and an examination of the sputum, is almost always sufficient to make a positive diagnosis. The laryngeal appearance of tuberculosis is almost always accompanied by a certain amount of edema of the ary-epiglottic fold with a typical pear-shaped swelling, the large end of the swelling directed towards the middle line. In gumma of the larynx the tumor formation before ulceration is more apt to be on the ventricular band. There is seldom much edema of the ary-epiglottic folds; chest and sputum examinations are negative for tubercle bacilli, and the Wassermann reaction will be found to be positive. In the case of cancer of the larynx, tests for tuberculosis and syphilis will be negative. Given therefore a thickening and induration of *one* vocal cord, and in the absence of tuberculosis or other symptoms, one strongly suspects a malignant invasion. This suspicion should not be left in doubt, but immediate steps taken by means of a biopsy to determine the real nature of the lesion. This biopsy can only be done by one who is competent to make such an examination, and I believe that most of the biopsies should now be done by direct laryngoscopy, because then one can be pretty sure of securing a large enough specimen, and from the most favorable site which should include the edge of any ulceration and into adjacent non-ulcerative area. A competent pathologist would then have a sufficiently large specimen to be able to definitely report upon the character of the lesion. Not only do the pathologists at the present time report upon the character of the lesion, but from the histological structures they will grade the disease as being radio-resistant or radio-sensitive. Dr. A. P. Stout, director of the Department of Clinical Pathology at Presbyterian Hospital, New York City, has given me his classification for determining whether the tumor is apt to be favorably or unfavorably affected by x-ray as follows:

HISTOLOGY

THE MICROSCOPICAL STRUCTURE OF EPITHELIOMA IS THE MOST IMPORTANT SINGLE FACTOR INFLUENCING THE EFFECT OF RADIOTHERAPY.

Histologic characteristics suggesting probable reaction to radiation.	1. Radio-resistant.	2. Radio-sensitive.	3. Combination of Nos. 1 and 2.
Differentiation.	Present.	Absent.	Radio-sensitivity depends which of the 2 predominates.
Cells.	Adult.	Embryonal.	
Size and staining quality of cells and nuclei.	Uniform.	Varying.	Biopsy showing mainly Nos. 1 or 2 may be misleading.
Intercellular bridges.	Present.	Absent.	
Keratinization and epithelial pearls.	Present.	Absent.	
Mitoses.	Rare.	Numerous.	

Extrinsic Cancer of the Larynx: These are usually already ulcerated when first presenting themselves for examination and we have therefore an ulceration of the epiglottis or ary-epiglottic fold, in the pyriform fossae or the posterior surface of the cricoid. Usually fairly early in the disease there can be felt enlarged cervical lymph nodes; in fact we have known cases where only the swelling of the lymph nodes in the neck caused the patient to seek a physician's advice. Whenever, therefore, one finds enlarged lymph nodes in the region of the angle of the jaw or below it alongside of the larynx, one should expect to find the cause for these enlargements, in some lesion in the naso-pharynx, oro-pharynx, pharynx, including the tongue, or in an extrinsic lesion of the larynx; ulcerations other than those due to malignancy may be from Vincent's organism, tuberculosis or gumma. It is much easier to procure a specimen for biopsy in the extrinsic varieties of cancer than in the intrinsic varieties. A curved biting forceps is all that is necessary.

Treatment: Intrinsic cancer of the larynx is much more apt to be of the type that is radio-resistant than those which are extrinsic. Consequently we feel that the best method of caring for these cases is surgical removal. If the lesion be very small and confined to one vocal cord, and there be no interference with the movement of the cord, a thyrotomy and excision of the growth has proved to be very effective in curing a considerable proportion of cases. If, on the other hand, the lesion involves the entire cord and there is an absence of movement of that vocal cord it will invariably be found that there is a considerable depth to the invasion, and in these cases nothing less than a total laryngectomy should be undertaken. The technique of this operation and the results obtained by the modern method of operation have been so perfected that this operation does not carry the high mortality that it formerly did. The use of an artificial larynx will permit most of these patients to carry on their vocation nearly as well as they formerly did. In the extrinsic cancers of the larynx owing to the early involvement of the lymph nodes of the neck, one has to decide between a total laryngectomy, accompanied by a block dissection of all of the lymph structures in the neck, or the use of x-ray to control the lesion. The results of surgical operation for cancer in this region are not very encouraging. They all have to have a laryngectomy and the percentage of recurrences is very high. During the last three years we have seen several cases treated by deep x-ray therapy where the report of the lesion was that it was radio-sensitive, and these cases have done very well. There has been an entire disappearance of the mass and a restoration of the functions of the larynx and pharynx. We have had other cases where the pathological report showed some question as to what effect x-ray would have on the mass. While a very few of these cases have apparently been cured, most of them were relieved for a few months only to have recurrence take place and the disease eventually result in the death of the patient.

When the pathologist reports a sarcoma, either intrinsic or more frequently extrinsic, the prognosis is exceedingly grave. While the sarcomata usually melt away very rapidly with the x-ray therapy, metastasis occurs in the lung, abdomen, bones or brain, and the patient succumbs to the secondary invasions quite rapidly.

THE ESSENTIAL FEATURES IN DIAGNOSIS AND TREATMENT OF ACUTE FRACTURES OF THE SKULL*

J. RALSTON WELLS, M.D.,
Daytona Beach.

Acute fractures differ considerably from old fractures of the skull both in symptoms and treatment. For this discussion, we will confine ourselves to the syndrome of acute traumatic fracture.

It is taken for granted that our discussion is entirely on the hardened skull. The infant's skull has, in proportion, less fracture and more brain damage for any given blow. We will, since this is a special subject, not consider the infant skull at this time.

The term "fracture of the skull" is used here only to remark on its fallacy as a designating term. In the surgery of today, we are not concerned in the "fracture of the skull" per se, except where the fracture is the actual cause of a brain injury, *i.e.*, depression, spicule, etc., but we are concerned by the degree and the kind of injury to the intracranial contents. The first consideration is how much and what kind of an intracranial injury is present, or more important, will be present. Our ability to see ahead of present symptoms spells, in many instances, the life of the patient. We must make an early diagnosis.

*Read before the Central Florida Medical Association, Gainesville, October 20, 1933.

By "early diagnosis," I do not mean necessarily early after the accident, but early in regards to onset of serious symptoms which may be indicative or conclusive of diagnosis, treatment and prognosis.

Many different classifications of fractures of the skull may be found, but I think all classifications should be disregarded insofar as treatment, or prognosis, is concerned, and each case judged on its own merits. The two kinds of fractures that should be recognized and treated accordingly are not peculiar to skull; however, they are here more serious because of the probable associated brain lesion. They are a compound fracture and a fracture with displacement of a part, or spicule. These should be recognized and treated recognizing the cerebral complications possible. To know the type of fracture is academically fine, but aside from the fact that a basal fracture without bony displacement usually denotes a more severe blow, thus more trauma to the brain, and a probable opening into a sinus, more injury and danger of infection to the intracranial contents, it is of no especial importance. Most serious traumatic brain lesions are in the presence of a fracture of the base and the symptoms usually make your diagnosis. Injury to the brain may occur without a fracture of the bony skull, i.e., contusion, concussion and even laceration.

The construction of the vault of the skull is that of layers so constructed that shattering is most unusual. This idea of laminated layers has been used practically by the manufacturers of shatter-proof glass. Because of the different construction and shape of the bones of the vault and the bones of the base, we often do have a trauma to the vault with resultant fracture of the base and injury of the basal part of the brain. It is not necessarily true that the heavier the blow, or trauma, the greater the damage. A small object propelled with great force may only make a local injury. A larger object, or a fall, may be less in force, but result in greater damage. Again, a vault fracture may be second to a trauma, or concussion of the brain, and be of no more consequence. A basal line of fracture may cross the paranasal, or the mastoid sinuses, or the body of the sphenoid bone. Here it opens up avenues for bacteria to enter, and openings in the large reservoirs of cerebrospinal fluid, or blood vessels (meningeal and carotids). This type of fracture is serious from several angles, but particularly because there is no surrounding soft parts that might automatically seal the fistulous tracts to retain blood or fluid, or to keep out infection.

Before considering symptoms, one more basic group of facts must be remembered. The brain is a soft mass, the skull an unyielding container. Any bulk that is added to the soft mass must necessarily make pressure upon this mass, and give rise to pressure symptoms. Following any trauma to the brain, as in any other part of the body, we have edema and possibly hemorrhage. Extradural, cerebral hemorrhage, or brain (cerebral) edema, all increase pressure, and these factors usually give rise to the various smyptoms that we can classify, use as a diagnosis and as an indication for treatment.

Symptoms of intracranial injury are many and differ, as one individual does from another. There are a few symptoms to be looked for in our first rapid examination that are basic: 1st, serum or bloody serum from any of the natural orifices; 2nd, consciousness, or unconsciousness, or if some little time has elapsed before you see the patient and the patient is unconscious, has this state been constant, or has there been a lucid interval; 3rd, state of the pupils: dilated bilateral, dilated unilateral, fixed or not fixed; 4th, respirations, and closely linked are the pulse, temperature and blood pressure; 5th, state of being: relaxed unconscious, relaxed conscious, or restless with either consciousness or unconsciousness; 6th, vomiting: present, past, or not at all; 7th, convulsions present, or absent; if present, the kind and areas, and in what sequence as to anatomical distribution; 8th, reflexes including paraplegia, exaggeration, involuntary urination and/or defecation, etc. All of the above must be quickly summed up and differentiated, if and when possible, from simple traumatic shock. All symptoms, except those of extradural increasing hemorrhage, can be summed up, a diagnosis made, a course of treatment mapped out, and no special hurry, except for shock treatment, is necessary. In an extradural hemorrhage, however, speed of active operative measures generally means the life, or death, of the patient. If a patient has been momentarily unconscious, then regains consciousness and walks off only to slowly again lose consciousness within a few minutes, or an hour (this interval may upon rare occasions be many hours in extent) quick action is imperative.

Extradural hemorrhage: the term "extradural

hemorrhage" is used usually to designate a bleeding or torn middle meningeal artery. The above general examination must be made, noting especially the three cardinal signs, one or more of which are usually found in extradural hemorrhage: 1st, patient is unconscious, lucid interval between unconsciousness; 2nd, a loss of motor reflexes over the opposite side of the body to the brain lesion, becoming more profound, and 3rd, Jacksonian convulsions. In order: the lucid interval is the recovery from the initial trauma, the second unconsciousness is a result of hemorrhage making pressure on a local area. A very severe concussion may mask this lucid interval to apparent complete absence. Motor weakness, or loss, is always progressive as the hemorrhage progresses and always starts in the face, spreading to the arm, then leg. Convulsions are from the same cause, and in the same order as the motor weakness. The warning here is to take notice of slight weakness and slight twitchings of the face and do not watch too long. Aside from this one diagnosis, all other acute traumatic brain injuries can be termed as resulting in intracranial pressure with the various general and/or localizing signs. Loss of consciousness transient, or for several weeks, indicates at first trauma (concussion), and later pressure. A deepening coma is alarming, a lessening coma encouraging. The supraorbital nerve pressure test is of much use here. A graph of Temperature-Pulse-Respirations-Blood Pressure should be made and kept at ½-1 hour intervals during the first hours. These should be taken by the same two or three persons in attendance (this latter to rule out normal personal differences.)

With a steady pulse and regular respirations, a mild rise in temperature and a fairly steady blood pressure, all is well. But with a slowing pulse, a deepening slowing respiratory rate, or a cyclic (Cheyne-Stokes) syndrome, together with a rising temperature (over 101°F.), and a rising pulse pressure, we have a grave degree of pressure developing. Also, when we have a persistent rising pulse rate becoming less full, and more thready, a rising respiratory rate more shallow, a rising temperature, and a rising pulse pressure, we are approaching a very dangerous intracranial pressure, and the breaking point in compensation. Something more than has been done must be instituted. When a slowing pulse rate crosses a rising pulse pressure line, and a temperature rising but too early for a rise from an infection, radical relief is imperative. Pupillary reflex changes, hemiplegias, vomiting, changes in deep reflexes, meningeal injuries, blindness, and other cranial nerve effects are of importance, but usually only as aids to localization of injuries, and as focal operative guides.

Treatment: treat, or regulate, or rule out initial shock. Dependent absolutely upon the diagnosis, we have two radically different treatments: 1st, immediate operative or, 2nd, watchful active palliation, with or without later operative procedures. Immediate operative for extradural hemorrhage, remembering the signs are contralateral to the lesion; if doubt exists, or the side not determined, a small opening into the temporal area will quickly dispell doubt and do no harm if no hemorrhage is found; waiting and doubt may cost a life. Operate boldly, rongeur radically, remove and irrigate the extradural clot, ligate the bleeding vessel at the lowest point possible, and usually do not drain, at most not over twenty-four hours.

The second line of treatment is that of controlling intracranial pressure: active palliative and active operative. Active palliative briefly comprises short interval check ups and efforts to reduce pressure. We have several in use: lumbar puncture, rectal injection of magnesium sulphate and intravenous injections of magnesium sulphate, or hypertonic sodium chloride.

I have purposely left out lumbar puncture in the entire diagnostic symptomatology. It is a procedure to be condemned in acute brain injuries. It does not give any information that can not be otherwise obtained; it may alter the brain mass to accommodate the new change in pressure, thus accelerating and increasing cerebral edema by releasing pressure, and for the same reason may keep up, or restart, hemorrhage; it can not drain the subdural space because the arachnoid membrane intervenes. To gain a short time, for one reason or another, after operation is definitely decided upon, or to definitely clear up a confusion as to the existence of

grave, and probable, operative pressure, usually over 18 mm. Hg, it is permissible. Hypertonic, intravenous solutions are to be condemned for approximately the same reasons as lumbar puncture. The rectal installations of magnesium sulphate, one to two ounces of saturated solution every 3-4 hours, does no harm; does not act as a purgative for several days, and in numerous instances, I have definitely seen intracranial pressure controlled by this method, when operative methods appeared almost imperative.

Active operative: when pressure rises to a dangerous level, in spite of the best treatment, institute operative measures. These measures are so varied, and depending on localizing signs, so different, that this subject constitutes in itself a separate discussion. Suffice—a subtemporal decompression is usual and should not be done prior to 6-8 hours post-traumatic because of bleeding, etc. Meningitis, or infection, from a compound wound, is also a separate subject. It rarely occurs inside of 24-48 hours, does not enter into our initial symptomatology, and its best treatment is prevention.

In conclusion: accurate diagnosis as to presence or absence of increasing extradural hemorrhage—if positive operate promptly. If the above diagnosis is ruled out, all skull and/or brain injuries should be placed at absolute rest physically, and insofar as possible the same for all special senses. Special nursing, or care, is imperative for the first day or so. Start immediately accurate chart records, graphic preferred; magnesium sulphate by rectum; ice to the head and back of neck constantly; turn patient to one side or the other to avoid inspiration of mucus and blood, etc.; keep bleeding orifices clean with antiseptic solutions, do not pack or plug tightly, but rather encourage drainage if not too severe; avoid morphine and other strong sedatives—they may and do mask early symptoms. Extreme restlessness usually means great intracranial pressure and often is the forerunner of coma. Only when the other signs of pressure are satisfactory, or when consciousness is so acute as to be aware of other painful injuries, may morphine be given. At times, full doses of bromides by rectum are permissible. Cardiac stimulants, unless in the presence of a known cardiac organic lesion, are contraindicated as they may tend to raise blood and intracranial pressure, and cerebral congestion. Atropine, whiskey, and strychnine—never; camphor, in first few hours to counteract general traumatic or exposure shock is good at times. Hot enemas and catheterization of the bladder are permissible at any time. Never do lumbar punctures, or use intravenous blood pressure reducing agents, except just prior to operative procedures. If they are used at this time, and pressure is thereby satisfactorily reduced before operation, do not change your mind—operate; the improvement is temporary, and all pressure signs will return, probably increased, within a short time.

Discussion, or inclusion, of x-ray examinations has been purposely avoided. They are usually of no concern in diagnosis, exceptions noted, if the examining surgeon is active. They sometimes do not show a fracture, even when present, to the most experienced surgeon, or roentgenologist; the movement to the patient is often harmful at a time when immediate shock treatment and quiet is essential. For matter of records—insurance records, medicolegal safeguards, and at times when a diagnosis is questionable x-rays are necessary. However, it is a good habit to have all fractured, or suspected fractured, skulls x-rayed before leaving your care. Do this either reasonably early to assist a doubtful diagnosis, or late for record reasons. Also, when the injuries to the brain are apparently insignificant at the time, and make no impression on the family, but you suspect, or fear, later cerebral developments, an x-ray showing a "fractured skull" is of great aid in allowing us to hospitalize and carefully study the case. Meningitis from a compound basal fracture, but with few and slight initial symptoms, can, and has, developed as late as the 38th day after injury.

This discussion, while apparently lengthy, is very short for such an important and increasingly common injury. Many points can and should be mentioned and enlarged upon, but I have attempted to present the salient points of must's, do's, and dont's, as I see them in clinical practice.

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The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price $3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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CHARACTER IN MEDICINE

In commemoration of the one hundredth anniversary of the founding of Tulane Medical School, the Class of 1934 dedicated their invitation booklet to Dr. Rudolph Matas. On the front page of this booklet, from the pen of this grand old man, comes the finest bit of advice ever offered to the young physician. Written to those aspiring to be surgeons it is nevertheless applicable to every branch of medicine. The editors of the Florida Medical Journal, believing that this short article will be an inspiration to every member of the profession, are pleased to quote verbatim.

"As an old teacher and practitioner of Surgery, I am often asked by young men who are aspiring to be Surgeons: 'What are the qualifications that make for a good Surgeon?' I invariably answer that a man must first possess knowledge, and then a surgical conscience. By a surgical conscience we mean not merely the consciousness of what is wrong with our technics or the procedures and methods that we apply in our operations, but with the morals that guide them. The surgical conscience is the fruit of knowledge, training and long culture in the Science and Art of Surgery and, in a purely technical sense, can be developed and highly cultivated.

"But the moral conscience is that intangible something, 'the still, small voice' that rising from the depths of our innermost selves, whispers its warnings when we are going wrong. It is the spirit of ancestral generations which, whether good or bad, is housed in us while in transit to our successors. Conscience is therefore an inheritance; and the seed of good or evil is implanted in us with our birth. Like other seeds, it will thrive when well cultivated, or it may shrivel and perish when planted in sterile soil. It is therefore influenced, for better or for worse, by the conditions and laws of its environment. The majority of those born of normal, healthy, honest and decent parents have the right seed sown in them when they are born. But conscience is erratic. Some people it misses altogether. They are born without the spark that brings it into existence. In others it is so small and atrophied that it becomes, like the appendix, a useless and dangerous nuisance which we might as well cut out altogether. Some people who have it, listen to it; others, if they do have it, continue to sleep and let it ring itself out—as they would an annoying alarm clock. Others are awakened and promptly get up, and set to work making things right with themselves. When a man wakens to the ring of his conscience, gets to work and starts to put his house in order, we say, he has CHARACTER. Now character is the will to put into action what the voice of conscience has roused in him. Conscience without will to act upon its bidding is powerless and might as well be dead. But the harmonious combination of the two makes the right minded man. When a man has neither conscience nor character he cannot be a good man, and if he is not a good man he cannot be a good surgeon.

"And no matter how skillfully he may take out appendices, gall bladders, resect stomachs, do hernias and other fine jobs in Surgery, we don't want him and he need not apply for fellowship in our Guild.

"Now, my friends, take these thoughts with you for the year; go down into the Valley with your brothers, and work them out in life."

THE PHYSICIAN'S PAY

In a recent number of the Virginia Medical Monthly, Dr. Beverly R. Tucker uttered a few words regarding the practice of medicine, striking a chord which immediately finds a response in the breast of many of us.

"The physician is the best paid man in the world. He is required to have an education which will be a benefit and a comfort to him all the days of his life. He wins a degree and attains the honorable title of doctor. He learns to know more intimately his fellow man than

anyone else can know his fellow. He gets praise for many things that he does not deserve and providence and disease are blamed for his mistakes. He wins the gratitude of those he serves. His charity work is valuable to his experience. If he is reasonably conscientious and works reasonably hard, he builds a practice that will insure him a good house, office and automobile and enable him to rear and educate a family and to stand the losses of the inevitably foolish investments he makes. If he has taste for invention there are innumerable unknown instruments and improvements awaiting him. If he wishes to discover, the laboratory is ready for him. If he likes research the facilities and libraries are available. If he craves adventure insidious dangers lurk around him and there are ever pioneer fields to enter. In his endeavors his government, his community and his fellow physicians stand ready to aid him. He is an advocate without a jury, a judge without a court, a minister without a surplice, a business man without guile, a farmer whose soil is the human body and whose crops are human health and happiness and he is a laborer without a boss. The physician is the best paid man in the world."

These words breathe an optimism which should strengthen us to meet our trials and labors; should encourage us as we realize how distinctly blessed we are in friends and opportunity; and should challenge us to greater activities in the pursuit of our vocation and its many compensations.

RADIO BROADCAST, 1932-33

The following broadcast was arranged by the Public Relations Committee of the Florida Medical Association and given over station WRUF, Gainesville:

MEDICINE AND URBAN DEVELOPMENT*

HENRY HANSON, M.D.,
Jacksonville

We do not know with certainty what the earliest form of life was but it appears probable that it was a one-celled living thing like an amoeba or a bacterium. The first of these were isolated independent individuals, some of which later grouped themselves in colonies. The transition from the one-celled unit with multiple functions to the many-celled organism in which a division of labor was established is the classical example of "ontogeny is the epitome of phylogeny" (the development of the individual is a recapitulation of the development of the race). If we look back into the earliest data on the origin and development of the human race we find a natural inclination to congregate, probably in response to a social instinct as well as for protection. In the wild regions such as the jungles of Africa and portions of South America we find examples of congregation among monkeys, apes and other animals traveling in groups. These move from place to place as the food supply is used up.

Among human beings the family is the first example of grouping. In the earliest stages of the human race when the male chose his mate and the family increased we see the early stages of tribal development and the need of some temporary resting place, first in the form of the cave or in open country the camp or the compound. From this we pass on to the villages or towns as stages in urban development. The early development of towns and villages was probably first in the form of stockades or forts for the sake of protection against predatory animals as well as for the sake of protection against other groups of human beings who sought to increase their own power by conquering and plundering their neighbors. It is probable that this feature runs parallel with the development of human intelligence. It seems that the first type of man lived almost entirely according to animal instincts quite similar to those which one can now observe among apes and monkeys. How long this stage continued we do not know.

With a gathering of large groups of human beings in more or less compact masses in limited space the frequency of contact brings out new problems of various kinds. Those which most concern us in this discussion pertain to health. It is inevitable that sickness of a transmissable nature should spread from one to another among a group of people who live under conditions which permit frequent and intimate contact. That this was recognized by primitive man is proven by the finding of the medicine man, the witch doctor, etc., (among the native tribes in Africa and the early inhabitants of the western hemisphere).

"Great cities present an epitome of the civilization about them. The city is the efflorescence of a nation's culture."[1] In America and Germany about one half of the population is in cities while

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, April 16, 1933.

in Great Britain 80% of the people live under urban surroundings.

We do not know for certain when the earliest city was founded. However our records take us back as far as 4000 B.C. (or 5000 or 6000 B.C. at Nippur in Babylonia) when a peaceful people called the Sumerians settled in the valley of the Nile.

There is a big jump from the time of primitive man to the Old Testament, and to the time of Moses who has been referred to as the patriarch of rural sanitation and the father of preventive medicine. The basis of the Mosaic sanitary code was cleanliness. Moses, 3000 years ago, taught temporary isolation.

The first name in Greek preventive medicine is Apollo, the son of Aesculapius (Greek Asklepios).

For protection the cities had walls built around them. But in order to live they had to have govnerment. Hence they created law. They had to have worship and finally they learned that in order to preserve their cities and keep the health of those within, they must try to cure the sick, or as they thought, those with Evil Spirits. Some who were more proficient than others at casting out these Evil Spirits and restoring the afflicted (to health) were called Medicine Men. This was the first medicine. When the people decided that for the good of all within the city walls, those who suffered from loathsome diseases should be carried beyond the city gates, that the water that they and their children drank must be kept clean (and dead things not thrown in it) they were, without knowing it, laying down the first law of (public) health.

Among the ancient peoples there were some up-to-date regulations. The Babylonians, for instance, had a sewerage system and brought their drinking water supply a long distance through open canals. The Sumerians used cesspools. Cyrus the Great obliged all his soldiers to boil the drinking water while on military campaigns.

When Rome had become a great city, the rulers were most careful to obtain a pure water supply for the inhabitants. At one time water was brought through pipes as far as 36 mlies from the city.

But Rome with her magnificent water and sewerage system passed away, and throughout the world huge towns and cities sprang up which had practically no provisions for maintaining or protecting the life of the common people. Benson[2] in his "Life in a Medieval City" says, "The ventilation and hygienic conditions were far from good as may be imagined from the smallness of the houses, the compactness of the city, particularly the parts occupied by the people, and especially of the primitive system of sanitation, which was content to use the front street as a main sewer. (Plagues perpetually harassed the people of medieval times and reduced the population miserably.) No advance was made in sanitation till the Victorian Age, when town sanitation was completely revolutionized and, for the first time, efficiently organized."

That this condition prevailed even in cities in our own country as late as seventy years ago is proved by a glance at the statistics of the time. (Especially in the poorer sections of our cities death stalked almost unchecked.) In the congested parts of New York City typhoid, smallpox, scarlet fever and typhus were ever present. Garbage was allowed to collect in the streets until they became impassable. The city sewers, unconnected with any main line to carry the contents out into the bay, simply emptied under the piers of the Hudson and East Rivers. During 1864-1865 New York had more than 2000 cases of smallpox causing more than 600 deaths. Philadelphia in 1865 had 773 deaths from typhoid fever and 334 from typhus fever. The Southern cities were no better off and frequently experienced frightful epidemics of yellow fever, cholera and typhus.

Today, thanks to medicine and sanitation, life in our towns and cities is immeasurably safer and pleasanter than it was even sixty years ago. Scourges like cholera, yellow fever, typhus and smallpox are practically unknown. (A pure drinking water supply is assured us, therefore we will not have cholera.) Medicine has discovered that the mosquito *Aedes aegypti* carries the virus of yellow fever and the *Anopheles,* the parasite of malaria, therefore by guarding ourselves from the bites of these insects we can escape such fevers. Immunization to smallpox and diphtheria is available to all who want it.

The high infant mortality so common in cities 30 or 40 years ago has been reduced through the application of medical knowledge for improving and safeguarding milk.

Another important step toward the healthy city is the growing understanding of the necessity for keeping vital statistics, the record of births,

deaths and disease incidence. Many times the knowledge of a single case of sickness may prevent what in early days would have started an epidemic. Where cases of the same disease are reported it is frequently possible to trace the source of the trouble, and by isolation and immunization prevent the spread of a disease which threatens hundreds with death. Birth and death statistics are the bookkeeping of life and death.

With the advance of commerce and industry, and the rise of the arts and crafts, there must also be an adequate social understanding of the part medicine has played. As our cities have grown rapidly, or slowly, there went hand in hand with their progress the art of medicine and the science of public health.

The rapid concentration of people in cities has presented and still is presenting a problem both for the medical man and the social worker. The cities are ideal media for the planting and growing of communicable diseases, the control of which requires knowledge, ingenuity and eternal vigilance.

Without medicine and public health our very existence in the cities would be threatened. Medical discoveries paved the way for cleaner, finer cities and helped to develop a healthier race of people. The key to progress for cities lies in the safeguarding of the health of the entire people in order that their personal happiness, and the success of their plans, may reach the ideal.

The medical sciences have been helpful in making life more secure for us, in adding to its average length and at the same time improving its quality for the majority.

BIBLIOGRAPHY

1. Woolston, H. W.: "The urban habit of mind." Am. Jour. of Sociology, v. 17: 613. 1912.

2. Benson, Edwin: "Life in a mediaeval city." N. Y., Macmillan. 1920.

STATE NEWS ITEMS

Dr. and Mrs. J. N. McLane of Pensacola announce the birth of a son, Jesse Newman McLane, Jr., at the Pensacola Hospital on June 7th.

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Dr. Walter G. Miles of Orlando was elected to Fellowship in the American Psychiatric Association during the annual meeting held in New York City, May 27-31.

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Dr. B. A. Burks of Winter Park is in New York doing post-graduate work.

Dr. Lester W. Cunningham of Jacksonville has returned from Cleveland where he attended the American Medical Association, its Radiological Section, the American Radium Society and the American College of Radiology of which he was made a Fellow.

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Dr. P. M. Lewis of Orlando has returned from Rochester, Minnesota, where he underwent treatment at the Mayo Clinic.

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The Jackson Memorial Hospital of Miami was recently approved by the Council on Medical Education of the American Medical Association for the training of residents in medicine and surgery.

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Dr. Carl D. Hoffmann of Orlando has been spending a few weeks at the Mayo Clinic in Rochester, Minnesota and at the Barnes' Hospital in St. Louis.

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Dr. and Mrs. Arthur Walters of Miami Beach are on a two months' trip through the New England states, making Boston their headquarters.

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Dr. C. J. Collins and family of Orlando are spending their vacation in New York.

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Dr. Herrman Harris of Jacksonville has returned from a three weeks' vacation spent in New England. During this time, Dr. Harris attended the graduation of his daughter, Miss Hannah Bessie Harris, at Vassar.

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Dr. Meredith Mallory of Orlando and Dr. F. Clifton Moor of Tallahassee have returned from the meeting of the American Medical Association. They were the Florida delegates to the convention and report a very interesting meeting.

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Dr. J. C. Nowling and family of West Palm Beach have returned from a vacation trip. Dr. Nowling attended the twentieth anniversary meeting of his class at Emory University in Atlanta.

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Dr. Ruth S. Hart of Winter Park is doing post-graduate work at Baltimore and New York.

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Dr. Maximilian Stern of Daytona Beach announces the removal of his office to 223 Ocean Boulevard. Dr. Stern's practice is limited to urology.

(Missing pp. Ad.)

The Semi-Annual Meeting of the Central Florida Medical Association was held in Leesburg, June 8. This Association is composed of doctors from the counties of Alachua, Marion, Lake, Hernando and Citrus. The following scientific program was presented:

"Treatment of Chronic Pelvic Infections", Gaston Edwards, Orlando.

"The Use and Abuses of Urinary Antiseptics", Edwin H. Andrews, Gainesville.

The following officers were elected at the business session: President, T. H. Wallis, Ocala; vice-presidents, George A. Dame, Inverness, C. M. Tyre, Eustis, and John E. Maines, Jr., Gainesville; secretary-treasurer, James L. Strange, McIntosh. A motion was passed at this meeting that the doctors of Putnam, Pasco and Levy counties be invited to join the association.

The next meeting of the Central Florida Medical Association will be held in Ocala in October.

FOR SALE—Spencer microscope, new Fisher coagulating outfit (complete), tonsil suction outfit, Baumanometer blood-pressure outfit, Cameron diagnostic outfit, illuminated ear speculum set with throat attachment, operating tables; also list surgical instruments, instrument cabinet, etc., all in good condition, some new. Offered at very reasonable prices, either separate or as whole, by widow. Mrs. H. Mercer Richards, Lakeland.

COMPONENT COUNTY SOCIETIES

BROWARD COUNTY MEDICAL SOCIETY

At the regular meeting of the Broward County Medical Society held in Ft. Lauderdale on June 27, 1934, the following action was taken:

A resolution was adopted which is a verbatim copy of the resolution adopted by the Duval County Medical Society with regard to the Medical Practice Act of the State of Florida, a copy of which all secretaries of component societies have in their files.

The Broward County Medical Society also respectfully suggests the following: that each local society appoint a Legislative Committee to contact local representatives in the State Legislature and get them in the proper frame of mind to vote for such a bill as the Florida Medical Association may submit to the coming Legislature.

The Society suggests to the Legislative Committee of the State Medical Association that due cognizance be taken of the resolution presented by the Economics Committee of the Association which was adopted by the House of Delegates at the last annual meeting in Jacksonville in framing the new laws.

DADE COUNTY MEDICAL SOCIETY

At the regular meeting of the Dade County Medical Society, held in the Huntington Club Rooms, July 6th, the following program was given:

"Hobbies", M. P. DeBoe, Miami.

"Agranulocytosis (Preliminary Report for the Treatment of Neutropenia with Yellow Bone Marrow)", M. Jay Flipse, Miami.

DUVAL COUNTY MEDICAL SOCIETY

The last meeting of the summer was held by the Duval County Medical Society, June 5th at the Mayflower Hotel, Jacksonville. The scientific program consisted of a symposium on "The Urinary Tract in Infancy and Childhood", as follows:

"Instruments: Cystoscopes and Catheters", E. T. Sellers.

"Cystoscopy and Pyelography", Robert B. McIver and William M. Shaw.

"Case Demonstrations: The Hematurias", Luther W. Holloway.

ORANGE COUNTY MEDICAL SOCIETY

The second annual picnic of the Orange County Medical Society was held at Lakeside Park, south of Orlando, June 30th. Although the crowd collected slowly, by the time the barbecue was served, some seventy-five members of the Association were present, coming from as far as Pensacola and Miami. From the standpoint of the State Association, the picnic was an asset as it brought so many men together, renewing friendships and medical and political contacts. It also afforded an opportunity for many of the state association committees—the executive, the cancer control, public relations and council—to hold meetings which were profitable.

The quantity of Brunswick stew consumed shows that it still possesses a place in the menu of all barbecue picnics.

Following the dinner, the president called a meeting of what he termed his cabinet, *i.e.*, the chairmen of the various committees, the president-elect, the secretary, and the business manager. This was one of the best group meetings held this year.

The Orange County Medical Society feels amply repaid for the effort and expense of the picnic and look forward to a similar meeting next year with increased attendance.